

Opinion 2392 (Case 3665) – *Musca purpurascens* Walker, 1836 (Insecta, Diptera, CALLIPHORIDAE): conservation of prevailing usage of the specific name by designation of a neotype

International Commission on Zoological Nomenclature

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Abstract. The International Commission on Zoological Nomenclature has conserved prevailing usage of the name *Musca purpurascens* Walker, 1836 (currently *Lucilia purpurascens*) by setting aside all previous type fixations and designating a neotype. The name is placed on the Official List of Specific Names in Zoology.

Keywords. Nomenclature; taxonomy; Insecta; Diptera; CALLIPHORIDAE; *Musca*; *Lucilia*; *Musca purpurascens*; *Lucilia purpurascens*; *purpurescens*; blow fly; Neotropical Region.

Ruling

The International Commission on Zoological Nomenclature has hereby:

- (1) used its plenary power to set aside all previous type fixations for the nominal species *Musca purpurascens* Walker, 1836 and to designate as neotype the male specimen in the Canadian National Collection of Insects, Arachnids and Nematodes, detailed in paragraph 9 in Whitworth & Rognes (2014, pp. 167, 168);
- (2) placed the specific name *purpurascens* Walker, 1836, as published in the binomen *Musca purpurascens* and as defined by the neotype designated in (1), above on the Official List of Specific Names in Zoology.

History of Case 3665

An application to conserve the specific name for a Neotropical blow fly, *Musca purpurascens* Walker, 1836, was received from Terry Whitworth (*Washington State University, Department of Entomology, Pullman, WA 99164–6382, U.S.A.*) and Knut Rognes (*University of Stavanger, Faculty of Arts and Education, Department of Early Childhood Education, NO–4036 Stavanger, Norway*). After correspondence the Case was published in BZN 71(3): 166–169 on 30 September 2014 (Whitworth & Rognes, 2014). The title, abstract and keywords of the Case were published on the Commission's website. No comments on the Case were received.

The Case was sent for vote on 1 September 2016 (VP 4). A greater than two-thirds majority of Commissioners voted FOR the Case (18 For, 7 Against).

Decision of the Commission

At the close of the voting period on 1 December 2016 the votes were as follows:

Affirmative votes – 18: Ballerio, Bouchard, Dmitriev, Evenhuis, Halliday, Harvey, Kottelat, Krell, Lamas, Ng, Pape, Rheindt, van Tol, Welter-Schultes, Winston, Yanega, Zhang and Zhou.

Negative votes – 7: Aescht, Alonso-Zarazaga, Bogutskaya, Grygier, Kojima, Kullander and Rosenberg.

No votes were received from Bourgoïn and Pyle.

Voting AGAINST, Aescht commented that in paragraph 4 of Whitworth & Rognes (2014, pp. 166, 167), it is stated that Aubertin's concept of *Musca purpurascens* was also employed in the recent monograph on Neotropical *Lucilia* by Whitworth, whereas according to paragraph 7 "Aubertin's description does not match the holotype of *M. purpurascens*". Consequently, there exist two different concepts, but which of these corresponds best to Walker's original description (the diagnostic characters unfortunately remain unmentioned)? It is thus unclear if the authors consider Aubertin's interpretation as a misidentification requiring a new name. Moreover, although many details are recognisable, paragraph 9 states that "[t]he taxonomic identity of the nominal species-group taxon *Musca purpurascens* Walker, 1836 cannot be determined from its existing name-bearing type". If this was the case, then how could the authors be sure about the taxonomic identity of the male? Was there any material of the further authors listed deposited somewhere and how do they interpret diagnostic characters of females and males? Aescht thus wondered why Article 75.3 ("Qualifying conditions"), particularly Article 75.3.4 referring to "destroyed" and Article 76.3 (in relation with Article 75.5) were not invoked. In her opinion, there was no clear evidence given for the "exceptional need" required by Article 75.3 and according to the Article 76.3, a shift of the type locality would be a consequence violating Article 75.3.6 ("evidence that the neotype came as nearly as practicable from the original type locality"). Under the current circumstances, as described in the proposal (i.e., the name *Musca purpurascens* is not threatened), her impression was that the stability of taxonomy, rather than the stability of nomenclature was threatened by the partially non-diagnostic condition of the name-bearing type involved. As the proposed neotype would not resolve the taxonomic issues, she voted against the case. Also voting AGAINST, Alonso-Zarazaga said that from the authors' description of the holotype in paragraph 7, it is clear that the proposed neotype has nothing to do with the original specimen, and in addition they have not tried to locate similar species in Santa Catarina (or at least in Brazil). Thus, Alonso-Zarazaga did not consider the conditions required by Article 75.3 to have been met—a neotype fitting at least the still numerous characters that can be seen in the holotype should be selected. Also voting AGAINST, Grygier observed that the locality of the proposed neotype was very far from the type locality. Furthermore, the details of the material examined by Auberton and by Hall are not provided, and it was also not clear whether Whitworth examined Auberton's material. As an alternative solution, the Commission could instead have suppressed *Musca purpurascens* altogether and approve a new name for the Auberton/Whitworth species based on a new type series. Also voting AGAINST, Kojima stated that the present case was either a taxonomic or a biological matter; that is, the fly concerned does not have either negative or positive economic/medical/hygienic importance, and the problem could be solved without intervention of the International Commission on Zoological Nomenclature. That is, *Musca purpurascens* Walker, 1836 should be treated as a nomen dubium and a new species would be described with *Musca purpurascens* of authors as its

synonym. Designation of the neotype collected at the place far from the type locality will cause another future taxonomic confusion. Also voting AGAINST, Rosenberg remarked that the application did not provide evidence that the name was in widespread use, or that the neotype from Costa Rica “came as nearly as practicable from the original type locality” (Article 75.3.6).

Original description

The following is the original description to the entry on the Official List in the ruling given in the present Opinion:

purpurascens, *Musca*, Walker, 1836: 355.

References

- Walker, F.** 1836. Descriptions, &c. of the Diptera. *In*: Curtis, J., Haliday, A.H. & Walker, F. (Eds.), Descriptions, &c. of the insects collected by Captain P.P. King, R.N., F.R.S., in the survey of the Straits of Magellan. *Transactions of the Linnean Society of London*, **17**(3): 331–359.
- Whitworth, T. & Rognes, K.** 2014. Case 3665. *Musca purpurascens* Walker, 1836 (Insecta, Diptera, Calliphoridae): proposed conservation of prevailing usage of name by setting aside the unidentifiable female holotype and replacing it with a male neotype. *Bulletin of Zoological Nomenclature*, **71**(3): 166–169.